

Appl. No.: 09/626,191
Amdt. dated February 3, 2004
Reply to Office action of December 3, 2003

REMARKS/ARGUMENTS

Applicants received the final Office Action dated December 3, 2003, in which the Examiner: (1) rejected claims 1-5, 8-13, and 15 as obvious over Technology Strategy, Inc. (hereafter referred to as TSI). Based on the arguments contained herein, Applicants respectfully request reconsideration and allowance of the pending claims.

I. CLAIM REJECTIONS

A. The Art Rejections

Examiner cited three references describing services provided by TSI. The references are: (1) screenshots of TSI's homepage (reference A); (2) an article, "Looking Back to Fashion's Future" by Ackerman of the Boston Globe (reference B); and (3) an article, "Merchants Try Complex Math Tools to Improve Inventory Decisions" by Koloszyk from Stores Magazine (reference C). Reference A teaches that TSI uses data mining, mathematical modeling, genetic optimization, and Monte Carlo simulation to develop analytical engines for forecasting sales and inventory requirements. Reference A further teaches that the analytical engines were designed for short-cycle non-linear behavior (*i.e.*, fashion merchandise). The analytical engines are used to optimize the timing and depth of markdowns, the allocation of inventory to stores, and the amount of inventory to enhance probability of maximum gross profits (see TSI's "Solutions" and "About TSI" homepage). Reference B teaches that TSI offers a computer analysis of past selling history within a chain of stores. Further, reference B teaches that TSI provides custom analysis of historic sales patterns to develop forecasts of the sizes and colors that may be needed in individual stores at various times of the year (see reference B, pg. 2, paragraph 8, pg. 3, paragraph 5). Reference C teaches that TSI analyzes historic data and creates a statistically derived forecast of future demand. Reference C also teaches that TSI provides a Gross Margin analysis, a Product Life Cycle analysis and a Volume-Price Engame analysis.

In the final Office Action, the Examiner correctly recognized that the art of record does not teach normalizing and averaging demand profiles of the similar

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products as required in claim 1. The Examiner, however, states that "Monte Carlo simulations normalize and average historical data to generate values for uncertain future." Applicants submit that, at most, the Monte Carlo simulation taught in the prior art predicts price optimization and/or gross profits for a product based on various factors such as inventory, sales, and markdowns (see Reference A). As explained in the attached Decisioneering website printout, Monte Carlo simulation "randomly generates values for uncertain variables over and over to simulate a model." Also, as shown in the attached iDecide reference, "Monte Carlo modeling takes randomly selected values of every node in [a] model and uses them in combination with each other until a statistically accurate representation of all possible combinations has been created." Applicants submit that the prior art reference cited by the Examiner would use Monte Carlo simulation with randomly generated values ("inventory, sales, and markdowns") to predict optimized gross profit. However none of the references mention or even suggest that Monte Carlo simulations use normalizing and averaging techniques as suggested by the examiner.

On the contrary, Applicants submit that "normalizing and averaging" as required in claim 1 is detrimental to the purpose of Monte Carlo simulation which is used to show all possible combinations of randomly generated variables. Specifically, by averaging all the possible combinations, the user is no longer able to see which combination of random variables actually produces the best result (e.g., averaging the values of the graph shown in the iDecide reference would produce an undesirable average value). In summary, Applicants submit that the Examiner is incorrect in stating that Monte Carlo simulation uses normalizing and that averaging is detrimental to the purpose of the simulation.

Furthermore, Applicants submit that Monte Carlo simulation would not be used to "normalize and average the demand profiles of similar products to obtain the demand profile of the new product" because Monte Carlo simulation uses randomly generated values. For at least these reasons, Applicants submit that claim 1 and all claims that depend from claim 1 are allowable.

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Furthermore, Applicants submit that the selling cycle for clothing is known and predetermined. Therefore, there is no need to normalize and average demand profiles as is required in claim 1. Applicants submit that it is well known that clothes are sold on a predetermined, seasonal basis. For example, both the attached "Accurate Retail Testing of Fashion Merchandise..." and "Managing Fashion Goods Inventories..." articles make reference to a "primary selling season." Accordingly, Applicants submit that it would not be obvious to normalize and average life-cycle demand profiles based on a prior art technology related to fashion products since fashion products have a known and predetermined life-cycle and thus are effectively already normalized. For at least this additional reason, Applicants submit that claim 1 and all claims that depend from claim 1 are allowable.

Furthermore, claim 1 requires "calculating an average demand per time period of each of the similar products, associating each average demand per time period with a date that represents a midpoint of the life-cycle of each similar product, and calculating an estimate of the average demand per time period at the date of the midpoint of the life-cycle of the new product." The Examiner, at least, recognizes that the prior art does not teach "associating each average demand per time period with a date that represents a midpoint of the life-cycle of each similar product" (see final Office Action, pg. 5, ¶12).

The Examiner also relies on a graph that has no axis labels and states that the prior art "uses this plot (with points) to determine the timing of markdowns during the season." Applicants submit that there is no way to know what the graph represents other than "data mining" (see Reference A). Furthermore, the graph referenced by the Examiner shows multiple points and, therefore, teaches away from using a single mid-point as required by claim 1. Furthermore, claim 1 requires "a midpoint of the life-cycle of each similar product." The Examiner, however, refers only to plotted points that represent "when to mark-down a product during the season" (see final Office Action, pg. 5, ¶14). Therefore, Examiner does not address the "midpoint of the life-cycle of each similar product" limitation of claim 1 and only references the new product life-cycle using a graph

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with no axis labels. For at least these reasons, Applicants submit that claim 1 and all claims that depend from claim 1 are allowable.

Claim 10 requires the same limitations as those described above for claim 1. Therefore, Applicants submit that claim 10 and all claims that depend from claim 10 are allowable for the same reasons as described above.


II. CONCLUSIONS

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,


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